ABSTRACT

A sealing device incorporating a block and tackle for assisting in sealing an internal tissue puncture with an internal and external component. The block and tackle provides a mechanical advantage multiplying an initial force to facilitate compression of the internal and external component together across the internal tissue puncture. The internal and external components may be an anchor and collagen sponge, respectively. The internal tissue puncture is generally an arteriotomy intentionally created in order to perform a vascular procedure. The ability to exert a greater compression force across the arteriotomy eliminates a tamping tube common to prior internal tissue puncture closure devices, and also eliminates additional steps heretofore common to sealing internal tissue punctures. The steps eliminated by application of the principles described herein include tamping the collagen sponge, attaching a tamping spring between a tamping tube and a filament connecting the anchor to the collagen sponge, and later removing the tamping spring.